

POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by section 5.2 of the *Colorado Primary Drinking Water Regulations* and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

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Entity Name: PWSID NUMBER:	Name	Address	Telephone Number
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS
1. Inspect each well head for physical defects and report					
a. Is raw water sample tap upstream from point of disinfection?					
b. Is wellhead vent pipe screened?					
c. Is wellhead seal watertight?					
d. Is well head located in pit or is any piping from the wellhead submerged?					
e. Does the ground surface slope towards well head?					
f. Is there evidence of standing water near the wellhead?					
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)					
h. Is the wellhead secured to prevent unauthorized access?					
i. To what treatment plant (name) does this well pump?					
j. How often do you take a raw water total coliform (TC) test?					
k. Provide the date and result of the last TC test at this location					

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. Inspect each point where disinfectant is added and report					
a. For hypochlorinator systems					
1. Is the disinfectant feed pump feeding disinfectant?					
2. What is the feed rate of disinfectant in ml/minute					
3. What is the concentration of the disinfectant solution being fed? (percent, or mg/l of chlorine as HOCl)					
4. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)					
5. What is the age (days) of the disinfectant solution currently being used at this treatment location?					
6. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?					

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
7. What is the total chlorine residual measured immediately downstream from the point of application?					
8. What is the free chlorine residual measured immediately downstream from the point of application?					
9. What is the contact time in minutes from the point of disinfectant application to the first customer?					

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Is the vent of each tank screened?					
3. Does the tank “float” on the distribution system or are there separate inlet and outlet lines?					
4. What is the measured chlorine residual (total/free) of the water exiting the storage tank today ?					
5. Are there any unsealed openings in the tank such as access doors, vents or joints ?					
6. What is the volume of the storage tank in gallons?					
7. Is the tank baffled?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	
2. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
3. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
4. On what date was the distribution system last flushed?	
5. Is there a written flushing procedure you can provide for our review?	
6. Do you have an active cross connection control program?	
7. On what date was the system last surveyed to identify cross connections?	

TOTAL COLIFORM SAMPLING INFORMATION	Sample 1	Sample 2	Sample 3	Sample 4
Total Coliform ROUTINE sampling Locations				
1. Describe the actual sample tap (exterior hose bib, bath tub, etc.)				
2. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)				
3. Is this sample tap designated on the sampling plan submitted with this information request?				
Total Coliform REPEAT sampling Locations				
1. Describe the actual sample tap (exterior hose bib, bath tub, etc.)				
2. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)				
3. Is this sample tap designated on the sampling plan submitted with this information request?				

ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. **Sketch** of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. Copy of the microbiological monitoring plan as required by Article 3.1.1(1) of the CPDWR's.
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.

SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?

CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

NAME: _____

TITLE: _____

DATE: _____